

AMENDMENTS TO THE CLAIMS

Please substitute the following replacement claims for the claims now appearing in the currently filed specification:

Claim 1 (currently amended): A vapor deposition method using a reactant gas ~~(15)~~ to form a thin film on a substrate ~~(7)~~ in a process chamber ~~(2)~~,
said vapor deposition method using an apparatus including:
the process chamber ~~(2)~~;
a flow channel ~~(5)~~ for supplying the reactant gas ~~(15)~~ onto said substrate ~~(7)~~ and discharging the reactant gas;
a substrate holding portion holding said substrate ~~(7)~~;
moving means ~~(12)~~ for relatively moving the substrate holding portion and said flow channel ~~(5)~~;
control means ~~(13)~~ for controlling the moving means ~~(12)~~; and
heating means ~~(10)~~ for heating said substrate ~~(7)~~, wherein
in advance before crystal growth, said control means ~~(13)~~ measures relative positions of the flow channel ~~(5)~~ and the substrate holding portion under each growth condition and stores positional data concerning the measured positions, and
based on a set growth condition as well as the stored positional data, said control means ~~(13)~~ performs control of the position of the substrate holding portion or the position of the flow channel ~~(5)~~ to decrease a change in relative positions of the flow channel ~~(5)~~ and the substrate ~~(7)~~.

Claim 2 (currently amended): The vapor deposition method according to claim 1, wherein the position of the substrate holding portion or the position of the flow channel ~~(5)~~ is controlled so that a bottom surface ~~(20)~~ on the inside and on a substrate holding side of the flow channel is almost coplanar with a crystal growth surface ~~(22)~~ of the substrate.

Claim 3 (original): The vapor deposition method according to claim 1, wherein at least two growth conditions are set.

Claim 4 (currently amended): The vapor deposition method according to claim 1, wherein said growth condition includes a heating temperature of the substrate ~~(7)~~.

Claim 5 (currently amended): The vapor deposition method according to claim 1, wherein said growth condition includes an internal pressure of the process chamber ~~(2)~~.

Claim 6 (currently amended): The vapor deposition method according to claim 1, wherein said control means ~~(13)~~ completes said control before the set growth condition is reached.

Claim 7 (currently amended): The vapor deposition method according to claim 1, wherein said control means ~~(13)~~ performs said control before and still after the set growth condition is reached.

Claim 8 (currently amended): A vapor deposition apparatus using a reactant gas ~~(15)~~ to form a thin film on a substrate ~~(7)~~ in a process chamber ~~(2)~~, comprising:

the process chamber ~~(2)~~;

a flow channel ~~(5)~~ for supplying the reactant gas ~~(15)~~ onto said substrate ~~(7)~~ and discharging the reactant gas;

a substrate holding portion holding said substrate ~~(7)~~;

moving means ~~(12)~~ for relatively moving the substrate holding portion and said flow channel ~~(5)~~;

control means ~~(13)~~ for controlling the moving means ~~(12)~~; and

heating means ~~(10)~~ for heating said substrate ~~(7)~~, wherein

in advance before crystal growth, said control means ~~(13)~~ measures relative positions of the flow channel ~~(5)~~ and the substrate holding portion under each growth condition and stores positional data concerning the measured positions, and

based on a set growth condition as well as the stored positional data, said control means ~~(13)~~ performs control of the position of the substrate holding portion or the position of the flow channel ~~(5)~~ to decrease a change in relative positions of the flow channel ~~(5)~~ and the substrate ~~(7)~~.